

QUICK LINKS

- Centre of Excellence for Energy
- Centre of Excellence for Health
- Centre of Excellence for Entrepreneurship
- Centre of Excellence for Digital Innovation
- Contact the Centres of Excellence

DISTRICT COLLABORATIONS

This month, the COE team hit the road to collaborate with curriculum teams in ASD-S and ASD-N. After a brief presentation, COE leads met with subject coordinators and district leads/coaches to explore opportunities for collaboration. This time has allowed us to continue the work of creating a shared vision for Centres of Excellence learning supports for K-12 classrooms.



District subject coordinators and leads in ASD-N collaborate with Centres of Excellence leads

Thank you for sharing your collective wisdom and passion with us!

K-5 RESOURCE DEVELOPMENT FOR COE WEBSITE – AMY TOMPKINS

Amy has taught in ASD-W for over 10 years, as a K-5 classroom teacher, music teacher, school counsellor, choir and band director, and environmental club leader. With a master's degree in curriculum and instruction, the skills and passion she brings to our team are invaluable. Amy will lead the development of inquiry-based and experiential learning opportunities that are accessible and impactful to primary and elementary students for each of the four Centres of Excellence!

TINY HOMES

An exploratory kit for Grades 3-5 which allows learners to explore, discuss, and construct sustainable options for future home design. With curriculum connections to math, literacy, social studies, and art, this kit showcases digital tools, future NB career paths, and how tiny



homes are impacting the housing industry in our own province. This kit will introduce key concepts and career related information from Energy, Health, Entrepreneurship and Digital Innovation. Stay tuned – this resource will be posted to each of the COE websites soon!







CENTRE OF EXCELLENCE FOR ENERGY

UPCOMING EVENTS

RENEWABLE ENERGY WEEK

November 14 - 18, 2022

Join representatives from NB's booming renewable energy industry in celebrating Renewable Energy Week. Webinars and presentations will take place all week. Recordings will be posted to our Speaker Series page.



NAYGN ESSAY CONTEST

Attention high school students! After researching energy sources and climate change, you are invited to propose an informed energy solution that limits climate change, allows developed countries to maintain their standard of living, and can provide reliable electricity to the 1.2 billion people currently without access to power. The proposed energy solution should consider the environmental and practical benefits and consequences of baseload (e.g. nuclear, fossil, hydro) versus intermittent (e.g. wind or solar) sources. Deadline to submit is December 16, 2022. For more info, visit, 2022 Essay Contest | **NAYGN**



COE ENERGY LEAD VISITS DORCHESTER



COE Energy Lead, Adam Trider, and EOS Eco-energy program officer, Lauren Clark, were invited to work with the middle school students at Dorchester Consolidated School in October. Students discussed the forms of energy, energy transformations and then designed and built their own wind turbine blades.

NUCLEAR SCIENCE WEEK

During the week of October 17-21, the COE Energy hosted three webinars and an in-person panel discussion highlighting the innovative work happening in the nuclear sector in North America. Presentations were provided by NB Power, The Canadian Nuclear Science Safety Commission, The Gaia Project, and The Colorado School of Mines. Recordings can be found on our Speaker Series page Speaker series | Centre of Excellence for Energy (centresofexcellencenb.ca)



Nuclear Science Week™

PROFESSIONAL LEARNING FOR TEACHERS

COE Energy Lead, Adam Trider, had the opportunity to present to teachers in ASD-E at their first Science Supper of the school year. The teachers discussed electricity in NB and then worked on a wind energy challenge. Interested in finding out more, connect with the Centres of Excellence at COE@gnb.ca

GEOTHERMAL CHALLENGE

Interested in a hands-on renewable energy activity? Check out the Geothermal Challenge. In this activity, students will design a model of a geothermal exchange mechanism to raise or lower the temperature of a solution. The success of the model will be determined by creating the greatest difference in temperature between the two containers.

PARTNERSHIP SHOWCASE: WIRE

Women in Renewable Energy (WiRE) launched their New Brunswick chapter in October. They now have chapters in every province and in several other countries. WiRE's mission is to advance the role and recognition of women and other under-represented groups working in the energy sector. We look forward to planning joint events together in the near future.

CENTRE OF EXCELLENCE FOR HEALTH

UPCOMING EVENTS

TEEN SLEEP WEBINAR SERIES AND SLEEP CHALLENGE

COE Health and Sleep Well are offering a gift of better sleep to the middle and high school students in New Brunswick. Sleep is vital to people at any age but for teens, profound mental, physical, social, and emotional development requires healthy sleep.

For more information, please visit: Teen Sleep Webinar Series and Sleep Challenge | Centre of Excellence for Health (centresofexcellencenb.ca)

HEALTH RESEARCH WEEK 2022

Do you want to learn more about Health Research and Innovation? The 2022 Health Research Week has several distinct events that highlight the role health research plays in New Brunswick.

Students can attend two free webinars on November 15 and 18, 2022.

- November 15: Webinar: Family presence, advocacy, and support in health settings.
- November 18: Webinar: Social determinants of health

For more information, please go to the COE Health Website - Health Research Week 2022.

COE HEALTH CELEBRATED SENIOR'S WEEK, OCTOBER 3-7, 2022



Grade 11 & 12 students from KVHS participated in the Centre of Excellence for Health NB Senior Week by creating fall art décor and table centerpieces that were brought to Shannex's Jubilee Hall, in Quispamsis, NB.

Housing and Interior Design students from

Shannon Case's class attended the home's "happy hour" and showcased their artwork, interacted with older adults, and enjoyed a piece of pie with their new friends. Residents and students enjoyed the visit and are very excited to plan future intergenerational activities with the Shannex Home.



NEW BRUNSWICK STUDENT SURVEY RESULTS – LIVE CLASS FOR STUDENTS AND TEACHERS

The COE Heath and the New Brunswick Health Council are excited to review the Student Wellness Surveys. What do we know about NB students' wellness? The New Brunswick Health Council asked students in Grades 6 to 12 to share their experiences through the NB Student Wellness Survey. Please join us on November 2, 2022 for a live class in English and/or French to learn and discuss what students told us in the latest edition of this Survey.

For more information, please go to the COE Health Website - NB Student Wellness Survey Results: Live class to review the results, November 2, 2022.

New Brunswick Health Research Foundation



Fondation de la recherche en santé du Nouveau-Brunswic



CENTRE OF EXCELLENCE FOR HEALTH

ALLIED Heath Week November 21-25, 2022

Virtual live classes for students and teachers will be offered from Horizon and COE Health during the week of November 21-25, 2022.

Allied Health professionals will share their work-life experience, why they enjoy their job, share their career pathway, and discuss what a typical "day in the life" looks like in their job.

Virtual live classes for students and teachers will be offered from Horizon and COE Health during the week of November 21-25, 2022.











10:30AM - Rebecca Stewart
Social Worker
1:30PM - Tracy Hale & Sydney Trenholm
Medical Imaging





INTERGENERATIONAL RESOURCE PACKAGE FOR TEACHERS

The COE Health and the district Experiential Learning Coordinators have partnered with the New Brunswick Association for Nursing Homes and Shannex to create an intergenerational resource package for teachers. An interactive map of the province and nursing homes will be released in the near future.

Over the next five years, we will expect to have almost 23,000 job openings in the healthcare sector in New Brunswick.

There are over 55 individual career pathways in the medical field in New Brunswick. Horizon Health Network and Vitalité Health Networks are the main employers in New Brunswick For more information, go to the COE Health Career Proflile page.

CENTRE OF EXCELLENCE FOR ENTREPRENEURSHIP

UPCOMING EVENTS

FINANCIAL LITERACY WEEK

The Center of Excellence for Entrepreneurship presents Financial Literacy Week from November 7-10, 2022. Our valued partners have lent their expertise for a series of live webinars for elementary, middle and high school students and teachers. The goal of Financial Literacy Week is to bring awareness and curiosity to K-12 students and teachers across the province. Our valued COE Entrepreneurship partners will be sponsoring a Financial Literacy Week contest for all participating classes to win a classroom celebration with refreshments of their choice! Deadline for Microsoft Form submission is November 10, 2022 at 4 p.m. https://forms.microsoft. com/r/rGN0y4JXq5

PITCHFEST 2022

PITCHfest is back for another year! PITCHfest is a one-day event that provides an enrichment and development opportunity for students to pitch their ideas to community mentors and partners. As a warm-up activity, students can be directed to last year's NB PITCHfest finalists to guess the winning submission on the COE Entrepreneurship website under "Speaker Series".

High School teachers are invited to a webinar/orientation, November 1, 2022 from 3:30-4:00pm.



NOVEMBER AT THE CENTRE OF EXCELLENCE FOR **ENTREPRENEURSHIP**

November is an exciting month for the Center of Excellence for Entrepreneurship! Financial Literacy week will be celebrated during the week of November 7-10, 2022 with live, interactive webinars for K-12. Join the Centre of Excellence for Entrepreneurship, Chartered Professional Accountants (CPA) New Brunswick, New Brunswick Financial and Consumer Services Commission (FCNB) and Junior Achievement as they lend their expertise in topics such as budgeting, cryptocurrency, good/bad credit and investing. There will be prize draw for all participating classes. The goal of Financial Literacy Week is to bring awareness and curiosity to K-12 students and teachers across the province.

ELEMENTARY WEBINAR WITH JUNIOR ACHIEVEMENT: THE MONEY GARDEN

On Thursday, October 20, over 20 classes consisting of more than 300 elementary school students participated in a live virtual workshop called The Money Garden. The COE for Entrepreneurship partnered with Junior Achievement to show students how money circulates and how to save and spend money.

EGGS AWAY!

Eggs Away: A Learning Activity for K-2. Prepare to get messy! This inquirybased learning activity tests students' entrepreneurial spirit as they create, construct, re-adjust, and develop a solution to an age-old problem for Humpty Dumpty and his love of walls.







GRADE K-2 LEARNING ACTIVITY

Prepare to get messy! This inquiry-based learning activity tests students' entrepreneurial spirit as they create, construct, re-adjust, and develop a solution to an age-old problem for Humpty Dumpty and his love



On October 18, 2022, Mr. Gauthier's grade one class at King Street Elementary School were the first to debut the COE's new K-2 resource called Eggs Away

CENTRE OF EXCELLENCE FOR DIGITAL INNOVATION

UPCOMING EVENTS

ATLANTIC CYBERSECURITY "UNCONFERENCE"

Atlantic Cybersecurity Collective's "Unconference" will take place November 12, 2022 from 9:00 am - 5:00 pm at the Cyber Centre in Fredericton. The agenda is created by the attendees at the beginning of the meeting. Anyone who wants to initiate a discussion on a topic can claim a time and a space. To register, go to: https://www.eventbrite.com/e/unconference-tickets-423688954067

INNOVATENB CELEBRATION

The InnovateNB Celebration is a full day event on November 22, 2022, aimed to raise awareness and spark interest in the innovative work that is happening in New Brunswick. Three of the province's largest economic development agencies - Envision Saint John, The Regional Growth Agency, and Ignite Fredericton alongside 3+ Economic Development Corporation are jointly encouraging New Brunswickers to support the amazing innovation happening in the province by attending the inaugural InnovateNB Celebration in Saint John on November 22, 2022. For more information, go to https://www. innovatenbcelebration.com/



CENTRE OF DIGITAL INNOVATION LAUNCH

The Centre of Excellence for Digital Innovation will be launching November 9, 2022. The goal of the centre is to deliver experiential digital innovation learning opportunities for both students and teachers across all four anglophone school districts in New Brunswick. A primary focus will be to support students and teachers in exploring a wide array of learning opportunities under the digital innovation umbrella, and to highlight the variety of career and post-secondary pathways available to students in the digital innovation industry in New Brunswick.

As the Centre of Excellence Team works to build content, capacity, and partners during the fall of 2022, several key areas have been highlighted by our District Advisory Committee as potential priorities. These include digital literacy and citizenship, cybersecurity, digital creative arts, programing, and coding. Where do you, as an educator, see the need for supports in the digital realm? Please reach out to Adam Binet with ideas, questions, or feedback!



CYBERSECURITY MONTH

October was "Cybersecurity Month". This is a month where the technology sector attempts to share some cybersecurity basics, guides, and checklists. Cybersecurity risks impact all of us and keeping informed of current best practices is an important topic. For more information on the importance of Cybersecurity, check out the Government of Canada's resources here: https://www.getcybersafe.gc.ca/en/cyber-security-awareness-month.

NBCC OPEN HOUSE

NBCC Open House will take place Saturday, November 5, 2022 providing students the opportunity to explore our programs and campuses, meet with faculty and staff, ask questions, and discover more about how NBCC could bring out their extraordinary skills. All events will begin at 9:00 am and run until 12:00 pm. We will have information sessions, campus tours, a program marketplace, live demonstrations, representatives from Working NB, and more. Plus, all attendees will be entered into a draw to win some awesome NBCC prize packages! For more information: https://nbcc.ca/visit-us/open-house

CENTRE OF EXCELLENCE FOR DIGITAL INNOVATION

CYBERTITAN IN NB SCHOOLS

The CyberTitan student cybersecurity competition closed its registration on October 5, 2022. This is a multi-round, experiential cybersecurity competition where students in middle and high school are given real-world technical scenarios and problems are tasked to, in a virtual environment, fix these cybersecurity issues and "harden" the computer. This year, there are over 5000 teams competing worldwide, which includes 52 teams right here in NB, representing all four school districts! Our NB teams will include 21 groups of middle school students. For perspective, there are only 865 middle school teams globally, and New Brunswick teams make up 2.42% of those teams – small but mighty! With an average of five to six students per team, this makes up a significant number of competitors, at roughly over 300 students participating. A huge thank you to the teacher coaches for volunteering to oversee these teams and best of luck as students embark on Rounds 1 and 2 (November 4-6) of completion. If you are a teacher/coach and have yet to contact Adam Binet for one team fee's reimbursement, please do so ASAP. Join us in congratulating the following schools for participating:

Bayside Middle School Bliss Carman Middle School Devon Middle School George Street Middle School Harrison Trimble High School Kennebecasis Valley High School Leo Hayes High School McAdam High School Miramichi Valley High School Moncton High School Nashwaaksis Middle School Oromocto High School Queen Elizabeth School Riverview High School Saint John High School Simonds High School St. Malachy's Memorial High School Sussex Regional High School

BUILD YOUR DIGITAL SKILLS WITH CODE. ORG AND PLURALSITE

Code.org and Pluralsight One are offering free access to over 350 online courses with 1000 hours of content free for one year for high school computer science students. Head to https://www.pluralsightone.org/product/education/codeorg-redemption-3m for more information.





COMPUTER SCIENCE EDUCATION WEEK

December 5-11, 2022 is "Computer Science Education Week" (CSEdWeek). This is an annual call to action to inspire K-12 students to learn about computer science, advocate for equity and celebrate the contributions of students, teachers, and partners to the field. Computer science and programming is all around us and is used in our everyday lives. Programmers play an essential role that allow us to drive more safely, meet virtually and play games. Keep an eye open for upcoming opportunities to participate in Computer Science Education week. There will be K-12 activities available on the Centre of Excellence for Digital Innovation website.

For more information on CSEdWeek go to https://www.csedweek.org/ and for more information on The Hour of Code go to www.code.org

Between February and June 2020, employment in the Canadian digital economy jumped from 10% to 11% of total employment. Because of this resilience and expected growth in influence, ICTC forecasts that employment in the digital economy will continue to grow to over two million by the end of 2022.

CENTRES OF EXCELLENCE CONTACT THE LEADS

Real World Labour Market Challenge for High School Classes

Between September 2022 and March 2023, high school classes have an opportunity to complete a Real World Labour Market Challenge where learners will provide solutions to the many labour market challenges facing New Brunswick. Using the lesson plans provided, educators can support their learners in project-based experiential learning where they will work to solve one of the following problems our province currently faces:

- Attracting and Retaining New Brunswick's Youth: How can the province and communities keep youth in New Brunswick?
- Obtaining a Diversified Workforce / Recruiting Underrepresented Groups: How can New Brunswick harness the skills, interests and capabilities of underrepresented groups when building the economy?
- Immigration and Welcoming Communities: How can New Brunswick communities and employers work to include and retain immigrants in the workforce?

Register your class at www.realworldchallenges.ca. Any high school grade or subject is welcome to participate in this cross curricular experiential learning project.

Have you ever tried project based learning?

Have your high school students guide their own learning with custom-built lesson plans

Your class will use project-based learning to solve some of New Brunswick's Labour Market Challenges. Use our:

- · Lesson plans and templates
- Classroom funding
- · Community of practice for teachers
- Professional development

realworldchallenges.ca





How to Engage with the Centres of Excellence

COE Website – Includes classroom activities, live events, experiential learning opportunities, career pathway information and speaker series videos.

COE Newsletter – Sent directly to your inbox on the last week of each month. It includes information about upcoming events, announcements, and stories from the centres!

Twitter - @NBCOE

Connect directly with a COE Lead for collaboration and support, sign up for our mailing lists, or email COE@gnb. ca with your questions.

QUESTIONS? CONTACT THE COE LEADS



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